

Statement of Academic Honesty

The following form is standard procedure for an exam that may be offered multiple times. Read the material below, then complete the form and return it with your completed exam. Your exam will not be graded unless a completed copy of this form is on file.

Course: IEM 3503/3513 Summer 2017

Test: Weekly Test # 3

There are others who may be taking this exam or a similar exam at a later date. You are in no way to have any form of direct or indirect communications regarding this exam with anyone. If someone asks something as simple as "How was it?" your best response is "I cannot talk about the exam." Any violation of the letter or spirit of the above will be treated as an act of academic dishonesty.

By completing the information below, I acknowledge that I have read and understood the Statement of Academic Honesty above.

Name (signature) _____

Name (print): _____

Student ID: _____

Today's Date: _____

NAME: _____

DR. COLLINS

TEST #3C (ON-LINE SECTION ONLY)

TIME LIMIT: 75 MINUTES

**TEST TIME WINDOW: WEDNESDAY, JUNE 28, 2017 (8:00AM) TO FRIDAY
JUNE 30, 2017 (5:00PM)**

(OPEN BOOK, ONE PAGE OF NOTES – 8 ½ X 11)

Attach Notes Page to back of Test when submitted for grade

ABSOLUTELY NO CELL PHONES OR BACKPACKS IN TESTING AREA!!!

Multiple Choice Questions: For each Multiple Choice question below select the most nearest answer from choices A – D. Properly write your selected answer in the blank beside the corresponding question. Each M/C question is worth 10 points each.

- (10)_____1. A \$10,000 face value bond pays dividends of \$1,200 (12%/yr bond rate) at the end of each year. If the bond matures at 20 years, what is the approximate bond value at an interest rate of 11% per year, compounded annually?
- A. \$ 8,245
 - B. \$ 9,300
 - C. \$10,800
 - D. \$12,820
- (10)_____2. Douglas wishes to purchase a \$1,000 bond from Jose who needs the money. There are 7 years remaining until the bond matures, and interest payments are made quarterly. Douglas decides to offer Jose \$850 for the bond because he wants to earn exactly 8% per year compounded quarterly on the investment. What is the “effective” annual bond rate of interest?
- A. 9.10%
 - B. 5.28%
 - C. 6.60%
 - D. 1.30%

- (10)_____ 3. One hundred \$1,000 bonds having a bond rate of 12% per year payable quarterly are purchased for \$95,000, kept for 10 years, and sold for \$92,000. Determine the “effective” annual yield rate on the bond investment.
- A. 13.74%
 - B. 14.35%
 - C. 16.90%
 - D. 18.25%
- (10)_____ 4. A \$200,000 bond having a bond rate of 10% payable annually is purchased for \$190,500 and kept for 5 years, at which time it is sold. How much should it sell for in order to yield a 8% effective annual return on the investment?
- A. \$177,425
 - B. \$174,750
 - C. \$171,250
 - D. \$162,575
- (10)_____ 5. Upon graduation you decide to purchase a new car for \$32,000 at a 6% per year compounded monthly rate for 5 years. You plan on paying the loan back with 60 equal monthly payments. How much are the monthly payments?
- A. \$434
 - B. \$620
 - C. \$1,005
 - D. \$1,790
- (10)_____ 6. Using the information from Question #5, what is the remaining balance after the 30th payment?
- A. \$17,200
 - B. \$22,900
 - C. \$28,600
 - D. \$31,680

- (10)_____ 7. Using the information from Question #5, what is the Payoff prior to making your 32nd payment.
- A. \$30,800
 - B. \$22,900
 - C. \$16,740
 - D. \$ 6,140
- (10)_____ 8. Using the information from Question #5, what portion of the 18th payment is principal?
- A. \$715
 - B. \$618
 - C. \$499
 - D. \$120
- (10)_____ 9. Diamond Crystal in Weatherford, Oklahoma is looking at a new bag filtration system to remove airborne pepper particles inside the production facility. The information below is for a filtration system from the U.S. Clean Air of America Corporation. MARR is 8%. Based on the information below what is the Present Worth of the proposed bag filtration system?
- First Cost = \$50,000
M&O Costs = \$ 2,000
Annual Benefit = \$11,000
Salvage Value = \$12,000
Useful Life = 8 years
- A. -\$4,300
 - B. \$ 0
 - C. \$4,300
 - D. \$8,200
- (10)_____ 10. Based on the Present Worth calculation in Problem #9 what decision should Diamond Crystal make from an economic feasibility standpoint?
- A. No decision can be made, not enough information
 - B. Accept the project based on Present Worth Analysis
 - C. Reject the project based on Present Worth Analysis
 - D. The company is indifferent